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ABSTRACT

The validity and effectiveness of a test preparation program designed to prepare students for the Praxis II Content Examination for teacher certification in physical education were studied. In response to student requests for help, a faculty member at Southern Connecticut State University developed a study program consisting of a set of five seminar and workshop sessions that included a simulated test. Survey data were collected from participants using criteria for the program established, in part, through a literature review. In 1998-99, 18 students participated in the study program, and 16 passed the content examination on their first try, for an 88% pass rate. The pass rate for nonparticpants the same year was 54%, and the pass rate for all test takers from September 1994 through June 1999 was 64%. Findings from the formative committee that prepared the survey and collected the data were reviewed by a summative committee that made some recommendations for program curriculum, continuation, and improvement. Eleven appendixes contain supplemental information, including descriptions of the roles of the formative and summative committees and participant questionnaires. (Contains 28 references.) (SLD)

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EVALUATION OF A PREPARATORY STUDY PROGRAM FOR THE PRAXIS II CONTENT EXAMINATION FOR TEACHER CERTIFICATION IN PHYSICAL EDUCATION

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in partial fulfillment of the requirements for the degree of

Doctor of Education

Nova Southeastern University

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Abstract of a practicum report presented to Nova Southeastern University

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EVALUATION OF A PREPARATORY STUDY PROGRAM FOR THE PRAXIS II CONTENT EXAMINATION FOR TEACHER CERTIFICATION IN PHYSICAL EDUCATION

by

Jean Mee

July, 1999

The problem addressed in this study was that a test preparation study program was being implemented to assist students in passing the teacher certification examinations, and the study program had not been evaluated. The purpose of the study was to answer the research questions, "Is the study program

valid in its objectives, content and methodology for the purpose of preparing the students to succeed in passing the Praxis II Examinations?" and, "Are students who have followed the study program passing the examinations?"

Evaluation methodology was used to answer the research questions. The procedures implemented in the study included review and analysis of literature, establishment of criteria for evaluating the program, implementation of data collection procedures, analysis of data, and evaluation of findings.

It was concluded that, based on the analysis of the literature and data that was collected, and the expertise and experience of the formative an summative committee members, the program is valid in its content and effective in improving the pass-rate on the examinations.

Potential benefits to the university were identified as improving services to students, increasing the university's success in providing qualified teachers at a time when teacher shortages exist, and providing an effective test preparation model for other teacher preparation programs.

It was recommended that the program be continued, that ongoing assessment of the program be planned and implemented, and that the information about the effectiveness of the program be made as widely known as possible in order to call attention to effective methods of raising teacher certification test scores as well as the need to evaluate programs on an ongoing basis.

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Chapter 1

INTRODUCTION

Background

Southern Connecticut State University is a public institution which has traditionally prepared its students for careers in teaching. Originating in 1893, the school was known as New Haven Normal School, became New Haven Teachers' College, then Southern Connecticut State College, and within the last eight years has consolidated with three other state colleges to form the Connecticut State University System. SCSU has expanded its programs of study to include business, finance, arts and theater, women's studies and a wide range of graduate and undergraduate courses and programs. Its primary mission, however, is to prepare men and women for futures in the field of education.

One of the State of Connecticut's requirements for completion of a teacher certification program, for all subject areas, is the taking and passing of the Praxis II subject area assessment of content knowledge. The examinations are developed, administered and scored by an independent testing service, and scores are reported directly to the State Department of Education, the university's Records Office, and to the student. Technically, students have completed the teacher preparation program when they have met all of the academic requirements of a four-year academic program and have graduated with a Bachelor of Science degree. However, the Connecticut State Department of Education further requires the successful completion of a content-specific examination, the Praxis II, taken independently at the conclusion of the degree program, in order for graduates to receive the Initial Educator Certificate needed for entry into public school teaching.

Nature of the Problem

The physical education teacher preparation program currently does not involve itself formally in preparing students to take the Praxis II Examination. In the four years that the Praxis Examination Series has been a certification requirement, a seemingly high proportion of seniors and graduates have not passed the Praxis II on the first attempt. The independent testing agency, the Educational Testing Service

(ETS), regularly publishes statistical data on the pass-rates for its various examinations. Recently, ETS reported a forty percent fail-rate nation-wide on the teacher certification examinations it administers (ETS, 1998). In fact, many students require several attempts before passing. The fail rate of physical education teacher certification students at SCSU is thirty-six percent, only slightly better than the national rate.

Currently, in Connecticut, there is a shortage of physical education teachers who are qualified to step into the many vacancies created by increasing student enrollments and teacher retirements. The shortage of minority teachers in the state is of key concern, given the increasing numbers of minority students in Connecticut schools in general. Concurrently, the number of minority teacher candidates in the state's teacher preparation programs is much too low to fill the needs for minority teachers. The need for teachers, especially minorities, has a direct bearing on the necessity to provide support for all teacher preparation students in successfully completing the Praxis II Examinations, thereby assisting them in becoming job-ready.

In response to students asking for help in preparing for the examination, a faculty member has developed a study program. The faculty member has followed the study program and has taken the examination under authentic conditions in order to test the effectiveness of the study prescription. Based on the faculty member's own experiences as well as feedback from study group participants, the test preparation program has been revised. Currently, the faculty member volunteers to meet with students on a regular basis to provide guidance in the use of the study program. The problem is that a study program has been developed and is being implemented while the validity and effectiveness of the program has not yet been evaluated.

Purpose of the Study

The purpose of this study is to evaluate the educational validity of the test preparation program and to study its effectiveness in improving students' pass-rate on the Praxis II Examination.

Significance to the Institution

The actions that may be taken by the University and the School of Education as a result of this study include the following possibilities. If the study program is determined to be valid in its contents and effective in increasing the pass-rate on the Praxis II Examination in Physical Education, other teacher preparation programs in the School of Education may use it as a model for the development of study programs for their content areas. Within the Physical Education teacher preparation program, the study program may become a regular course offering for all teacher certification candidates.

Relationship to Seminar

This study is related to the curriculum development seminar in that the program of study for test preparation is a course of study specifically developed to prepare students to take and pass the teacher certification examination upon completion of their teacher preparation program at SCSU.

Research Questions

There are two research questions that this study will address. First, "Is the study program valid in its objectives, content and methodology for the purpose of preparing the students to succeed in passing the Praxis II Examinations?" Second, "Are students who have followed the study program passing the examinations?"

Definition of Terms

For the purposes of this study, the following term needs clarification.

Praxis II Examination. The Praxis II Examination consists of subject assessments intended to measure knowledge of subjects the teacher preparation graduate will teach. The assessment is also intended to measure general subject-specific pedagogical skills and knowledge. The State of Connecticut Department of Education Teaching Certification Bureau requires that two components of the Praxis II Examination be passed, the 0091 and 0092 sessions, each with a minimum passing score of 154 (See Appendix A).

REVIEW OF LITERATURE

Background

Connecticut's Education Enhancement Act of 1984 provided for a network of support and assessment programs that represented a comprehensive effort to attract and retain highly qualified teachers. In 1990, the Connecticut Competency Examination for Prospective Teachers (CONNCEPT) program was regarded as the foundation piece of the Enhancement Act. The centerpiece of this program was the CONNCEPT Examination. In a report documenting the transformation that had taken place in Connecticut as a result of the CONNCEPT program, critical needs and policy implications were identified. Data on the overall performance of CONNCEPT examinees over the four years of the program, performance on individual subtests over the period, performance by certain key indicators, e.g. reported SAT scores, ethnic status, gender, and institutional affiliation of examinees was included in an evaluative report. The report confirms the effectiveness of CONNCEPT in significantly increasing the level of skills of individuals seeking Connecticut certification without jeopardizing teacher supply. However, low minority representation indicated that much needed to be done in the areas of preparation, remediation, and recruitment (Connecticut State Department of Education, 1990). The Connecticut State Department of Education contracted for the Praxis Series Examinations, developed and administered by the Educational Testing Service (ETS) due to its more widespread use across the country and the ETS's documentation supporting the reduction of testing bias against minorities. The second stage of the Praxis Series Examinations, the Praxis II, consists of assessments of content knowledge in the specific subject area in which candidates will be certified to teach.

Types of Test Formats

An issue bearing consideration is the nature of the particular certification examination. The two examination sessions which are required for physical education teacher candidates in Connecticut are a multiple-choice content knowledge examination (0091) (See Appendix B) and an essay examination on movement forms, analysis and program design (0092) (See Appendix C). The content knowledge

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assessment is a multiple-choice format, and the movement forms, analysis and design assessment is a constructed-response format. Since the examinations are nationally standardized, the examinee is being assessed on content that is not necessarily specific to their particular institution's preparation program, nor even the content that drives the common core of teaching in the particular state in which the teacher would be certified. However, graduates need to pass in order to obtain teacher certification.

In the first section of its policy notes, the ETS examines teacher availability, and concludes that there is an undeniable shortage of minority teachers. In its second section, the agency reviews the background and achievements of minority group members, chiefly Black and Hispanic teacher candidates, who take the NTE tests. A study of successful and unsuccessful candidates found that strong academic preparation and support programs are essential for the development of prospective minority teachers (ETS, 1991).

Standardized tests have become a permanent feature of the educational enterprise. Unlike other types of tests, standardized tests serve to determine where a particular student stands with respect to a sample of students intended to represent students in general. Scores are recorded in terms of percentiles or grade equivalents - that is, what percent of students in the sample scored lower than the student in question, or what level of achievement or knowledge a given student's score represents (Lyman, 1998). Statistics published by ETS indicate that a high proportion, over forty percent, of graduates nation-wide do not pass the certification examinations in any given test administration period (Educational Testing Service, 1991).

Standardized tests are typically administered under highly controlled conditions so that students' scores can be fairly compared with students who took the test under those same conditions. Frequently, these conditions vary markedly from the conditions to which students are accustomed. The tasks themselves may be very different from classroom tasks familiar to students. Many students have little difficulty coping with these unusual conditions and novel tasks; however, some students do have

difficulty demonstrating their skills and knowledge under these conditions. Such students can benefit greatly from training in test-taking skills (Scruggs & Mastropieri, 1992).

The Need for Teaching Test-Taking Skills

The helpfulness of study programs in test preparation are an element which bears consideration. The conclusion of one study was that the best way students can improve their entrance examination scores is to enroll in more preparatory courses. In this study, strategies used by teachers included the teachers' acquiring previous tests actually given and using them in the preparatory courses (VanScoy, 1997). Aggressive test preparation, including adjustment of attitude on the part of the test taker are part of a system described by Judy Beal (Beal, 1997). In this system, the test preparation program includes not only the intensive review of content which is anticipated to be on the standardized test, but also incorporates changes in attitudes as important in the examinees' approach to the taking of the test.

Many teachers have found that their students are less intimidated by standardized tests when they have had the chance to discuss such basic topics as test objectives, skills, affective and cognitive learning, grading curves, scoring procedures, answer sheets, and especially the purposes behind particular tests (Devine, 1989).

Students may be having difficulty passing the examinations for several reasons. They may not know the content material; they may not understand the vocabulary used in directions and test questions; students may not be able to adequately express themselves on the constructed response test; they may have problems due to the way the tests are constructed. Some possible solutions might be to re-write instructions or rephrase questions and answer choices, read directions and questions as a group and discuss interpretations, and inquire whether students are having specific problems (Idol, 1996).

In a program to help Pennsylvania adult learners prepare for business school entrance examinations, students were given simulated tests developed specifically for orientation to test format, content, vocabulary, and time-limits that would be encountered during the test-taking event (Project Tune-Up,

1995). The use of these strategies in combination was shown to significantly improve the percentage of candidates eligible for acceptance.

Millman, Bishop and Ebel (1965) defined "test-wiseness" as "a subject's capacity to utilize the characteristics and formats of the test and/or the test-taking situation to receive a high score" (Millman, et al, p. 707). In other words, students high in "test-wiseness" can score higher than students of equal ability but lacking test-wiseness, by using their knowledge of specific test formats and testing situations to maximize their performance. Test-taking skills, then, are the skills that, when used effectively, contribute to a "test-wise" individual. Although test-wiseness in not completely independent of other cognitive abilities, such as general intelligence , it nonetheless has been demonstrated to have some of its own unique properties (Scruggs & Mastropieri, 1992). Millman and his colleagues developed a taxonomy of test-taking skills, in which they identified six major elements; four of these were considered to be independent of the test maker or test purpose and can be applied to tests generally. Two were considered to be dependent on specific knowledge of the test maker or test purpose. The four independent elements included time-using strategies, error avoidance strategies, guessing strategies, and deductive reasoning strategies. The two elements identified as dependent on test constructor or test purpose were intent consideration strategies, and cue using strategies.

How test taking skills are taught depends on the specific skill or set of skills to be learned, as well as the age and ability of the learners. Scruggs and Mastropieri (1992) recommend that the teacher provide direct teaching of the skills in question followed by guided and independent practice on a variety of practice tests with review and feedback of student progress. They feel that teachers should always consider how students will be required to respond on tests, and be sure they will answer questions to the best of their ability. Students should practice studying and responding in the way in which their knowledge will later be evaluated. That is, if students will be required to write out essay responses, they should be given opportunities to study and practice writing essay-type responses. During these practice

sessions, teachers can determine which, if any, performance deficits are due to inadequate content knowledge, and which are due to inadequate test-taking skills.

The aim of test-taking skills training is to improve the overall validity of the test by making scores more accurately reflect what students really know. This is done by making sure that students lose points only because they do not know the information, and not for some reason unrelated to content knowledge, such as marking an answer choice incorrectly, or misinterpreting the test directions. "Teaching to the test," on the other hand, refers directly to teaching specific items which will appear on the test. If the entire content being taught is being tested, it makes sense to teach to the test (Scruggs & Mastropieri, 1992).

Identifying Test-Taking Skills

Many students are poorly prepared for test-taking situations, and this lack of "test wiseness" is often responsible for test scores which do not accurately reflect the students' knowledge (Scruggs & Mastropieri, 1992). In designing a prescription to teach test-taking skills, Scruggs & Mastropieri first pose two guiding questions. First, 'what are test-taking skills?' Second, 'how do you teach test-taking skills?'

A third question that needs to be answered in designing a program for teaching test-taking skills is that of determining which skills need to be taught. Test formats can be a particular source of difficulty for some students. Using specific test formats can help determine whether students are likely to have difficulty manipulating these formats. Research by Veit & Scruggs (1986) has suggested that many students have difficulty with the use of separate answer sheets. Scruggs and Mastropieri (1992) recommend working with students on improving their ability to use separate answer sheets so that this problem does not obscure what they know. They suggest specific strategies including practicing speed, correctness, and correct coloring on separate answer sheets under simulated test taking conditions.

Veit and Scruggs (1986) found in their research that students could gain as much as ten to fifteen percentile points by improving test-taking skills without even reviewing the content being tested. Further,

Scruggs & Mastropieri (1992) suggest that showing students how much better they are taking tests reduces the students' level of anxiety and therefore improves performance. General all-purpose test-taking strategies include (1)academic preparation strategies, (2)physical preparation strategies, (3)attitude-improving strategies, (4) anxiety-reducing strategies, and (5) motivational strategies (Veit & Scruggs, 1986).

The Need to Evaluate

Curriculum assessment, traditionally, is seen as something that occurs at the conclusion of some area or unit of curriculum study. The curriculum is perceived to be a kind of applied treatment that must be assessed in terms of its predetermined goals and prefashioned outcomes. While such an aspect of assessment in the curriculum is certainly important, the progressive idea of assessment in the curriculum is one that is continuous and that, in certain instances, might be an initiating activity rather than a concluding one in the conduct of curriculum improvement or reform (Hlebowitsh, 1995).

Assessment, it is important to note, is *of* the curriculum. It is part and parcel of the very essence of the curriculum. Questions related to what to teach, how to teach, and why to teach (all fundamental to the construction of the curriculum) are always accompanied by a desire to know about effects; to know, for instance, whether or not certain methods of knowledge organization or certain pedagogic strategies met certain expected outcomes, or to know whether or not the rationale behind the curriculum was justifiable in terms of its consequences in the lives of learners. The question is not whether assessment will play a role in the curriculum, but what its nature shall be.

Ideally, of course, the widest range of assessment and testing techniques - including quantitative measures, essays, interviews, portfolios, and various performance and achievement exams - should be used in the curriculum. This multi-faceted strategy toward assessment allows the curriculum to operate without being unduly influenced by the dominance of any particular assessment methodology, and it protects against the condition of building the curriculum around the assessment approach (Hlebowitsh, 1995).

The process of evaluating the effectiveness of a program which is intended to be continued is, in effect, a plan for improvement. The program, prior to its evaluation, is essentially a pilot program. Until material has been tried out by the population for whom it was intended, the degree to which it meets its intended objectives is uncertain (Rowntree, 1994). The process of getting feedback about the acceptability and effectiveness of materials is incorporated into the concept of evaluation. Evaluation takes three main forms: critical commenting, piloting, and continuous monitoring. Rowntree (p. 160) provides a list of issues for inquiry during the evaluation process. The list , which applies directly to evaluation during the piloting process, includes four major components: (1)theoretical instruction, including clarification of course aims and objectives, relevance of content, suitability of methods and media, and personal guidance, (2) practical work, including coverage of skills, relation of theory to practice, availability of feedback, and relevance to "real-life" situations, (3) assessment, including appropriateness, clarity, helpfulness of feedback, and availability of individual help, and (4) general ongoing evaluation, including responsiveness to learners' needs, learner perceptions, rating by learners of course features, and learner suggestions for improvement. Rowntree suggests that these issues be raised, with supporters as well as learners, during continuous monitoring as well as piloting.

Program evaluation is a process used to determine whether the design and delivery of a program were effective and whether the proposed outcomes were met (Caffarella, 1994). Evaluation is a continuous process that begins in the planning phase and concludes with follow-up studies. Evaluation done to improve or change a program while it is in progress is termed 'formative evaluation.' When evaluation focuses on the results or outcomes of a program, it is called 'summative evaluation.'

The heart of program evaluation is judging the value or worth of an educational program (Brookfield, 1986). This is not an easy task for three major reasons. First, it may be difficult to demonstrate that program outcomes are really tied to what happened in the program. Second, developing clear criteria upon which judgments can be made may be hard to do, especially for program outcomes that are not clear or quantifiable at the onset of the program. This does not mean that criteria for program

success should not be developed, but that program staff may have to think differently about the evaluation processes used and about who is involved. Third, some people who plan programs may not want to make judgments about their programs or have others make those judgments. This is especially true in environments where evaluations of any kind are seen as punitive or are used primarily to advance political or personal agendas (Caffarella, 1994).

There is no one acceptable systematic process for conducting a program evaluation. A number of descriptions of the process have been developed; although systematic program evaluations are a desirable and necessary part of the programming process, Knowles (1980) and Rothwell and Kazanas (1993) have cautioned program planners of four major pitfalls. First, the outcomes of some educational programs may be too complicated, the number of variable affecting those outcomes too numerous, to allow planners to demonstrate that a given program actually produced the desired changes. Second, current evaluation procedures, however scientifically rigorous, may not be able to provide hard evidence that the more subtle, and at times more important, aspects of the educational program have been achieved. Third, conducting systematic evaluations costs time and money, neither of which some organizations and groups are willing to provide if they see no immediate payoff or value for evaluating programs. Fourth, when staff know that no action will be taken on the basis of evaluation findings, it may be better not to collect the data at all because the evaluation process raises expectations on the part of participants and/or sponsors that changes will be forthcoming.

Plans of Evaluation

There are numerous approaches to or models of educational program evaluation. These consist of a framework of perspectives and procedural methods for conducting evaluation. Because evaluation is often a multifaceted endeavor, more that one approach or model may be employed in combination in the evaluation process. The "levels of evaluation" approach (Kirkpatrick, 1987) is still the most generally used form of evaluation (Munson, 1992). Kirkpatrick model measures four different levels or areas: (1) participant reactions, (2) learning, (3) behavior change, and (4) results or outcomes. The focus is

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primarily on participant reactions and changes and on organizational changes (Kirkpatrick, 1987). Participants are usually asked to complete some form of questionnaire indicating their opinion on such items as content, instructions, instructional techniques, facilities, and food service. They are also sometimes asked to more generally list the strengths and weaknesses of the program, what they perceive they have learned, and recommendations for future activities. Soliciting participant reactions is most often done at the end of the program. In addition, some program planners like to request participant feedback for individual sessions within longer programs. When evaluation data are generated for individual sessions, these data are used in two ways. The first is to provide feedback to individual instructors and presenters. The second is to contribute to a larger data set focused on evaluating the program as a whole (Caffarella, 1994).

In planning for evaluation of programs and curricula, it is essential that the evaluators ask themselves several guiding questions, as suggested by DiStefano (1996) in "The IUPP Evaluation: What We Were Trying to Learn and How We Were Trying to Learn It." First, what were we trying to learn? What the evaluation seeks to find out must be clarified. Next, how were we trying to learn it? The range of possible ways of gathering data includes information provided by the instructor, student journal-keeping, questionnaires, site visits, and assessments of learning. Once the evaluation procedure is designed, it must be implemented by collecting student journals, tallying and analyzing questionnaires, analyzing data collected on site visits, and analysis of pre- and post-tests. Analysis of the overall data collected includes the selection of sample anecdotes from student journals, notation of the emergence of consistent signals, systematic statistical analysis of data collected (if applicable) and the drawing of conclusions, that is, asking "what did we learn?"

Jasparro (1998) promotes the systems approach to evaluation as producing better alignment among written, taught, and tested curriculum. Through the systems approach, data and information gathered through comprehensive curriculum evaluation can be used to improve other core areas of the system:

organization, instruction, assessment, and professional development. A systems approach ensures uniformity in evaluating curricula in each subject area.

Summary

Increasingly higher standards for teaching certification require increasingly higher performance on certification examinations. Standardized content knowledge examinations are a permanent feature of the teacher certification process in Connecticut; candidates must pass in order to receive their Initial Educator Certificate. There is considerable evidence to support the importance of learning test-taking skills as well as participation in test preparation courses in leading to improved performance on a variety of test formats. The aim of test-taking skills training is to improve the overall validity of tests by making scores more accurately reflect what students really know, and to make sure that students lose points only because they do not know the information.

Assessment of student learning, as well as program effectiveness, is fundamental to program improvement. The literature describes a wide range of evaluative techniques and models, which can be used to determine the value or worth of a program. The objectives and process of evaluation must be carefully developed to avoid obstacles and complexities that will prevent the acquisition of meaningful information and therefore program improvement.

Chapter 3

PROCEDURES

For this evaluation study, five procedures were used. First, a review of the literature was conducted. The review included readings about existing test preparation programs and studies, which aided in the identification of program content against which to compare the study program. The literature review produced several examples of classic evaluation models (Knowles, 1980, Brookfield, 1986) as well as techniques that provided for greater flexibility in adapting to a variety of programs and curricula (Caffarella, 1994, DiStefano, 1996, Idol, 1996, and Nweke & Noland, 1996).

Information gathered through the literature review assisted in the second step, which was the establishment of criteria that was used to determine the validity and effectiveness of the study program. A formative committee was formed to guide this second step. Committee members were identified on the basis of the potential expertise each could lend to the study, and each member was contacted through personal conversation. Two meetings were scheduled for the establishment of criteria for the study and to analyze data and make recommendations. Prior to the first meeting, formative committee members were provided with information gathered in the literature review; the study program outline, as well as supplemental materials used in presenting the program, were also provided for review. Formative committee input, based on committee members' expertise, contributed to the criteria established for the study. A list of the members of the formative committee is included in the appendix section of this report (See Appendix E).

The third step was to make a determination regarding the method for collecting data, and the procedures to be implemented. The committee established that the criteria for evaluating the program for both content validity and effectiveness should include a participant questionnaire. Several examples from the literature search were reviewed; the committee determined that the *Session Content & Process Questionnaire* (Caffarella, p.129-130) would be modified slightly and would be used to gather data from

program participants. Prior to the second meeting, the participant survey was conducted using the *Session Content & Process Questionnaire*, and results were tallied.

Fourth, data was collected and analyzed according to the criteria that had been established. At the second meeting, results of the questionnaire were analyzed. In discussion about the presentation of data supporting the effectiveness of the program, the ex post facto versus time series statistical analysis were discussed. The committee recommended presenting the data in the report using the ex post facto design. During this step, the formative committee made several recommendations based on its evaluation of the study program. A history of committee activity is also included in the appendix section of this report (See Appendix H).

The fifth procedure was the formation of a summative committee for the purpose of evaluating the findings of the formative committee and to make a determination as to what would be done with the final report to maximize its impact on the educational process. Summative committee members were identified on the basis of the involvement and experience each has had in developing, conducting, and evaluating similar programs, and each was contacted through personal conversation. A list of Summative Committee members is included in the appendix section of this report (See Appendix F). While no formal meeting was scheduled, summative committee input was provided through personal and telephone conversations.

Members of the committee were provided with the information gathered through the literature review, the study program outline, the formative committee history of activity and recommendations, the participant questionnaire tally of results, and the statistical data supporting the effectiveness of the study program. Additional information requested by the committee included the physical education teacher preparation planned program of studies, and the organizational chart of the School of Education. The researcher was asked to report on the status of the NCATE accreditation self-study process at SCSU and within the teacher preparation program. A history of committee activity are provided in the appendix section of this report (See Appendix I).

Assumptions

For purposes of this study the assumption was made that the formative committee would have the knowledge and experiences necessary to guide the process of the study. It was also assumed that the summative committee's evaluation of the results of the study would be valid.

Limitations

The relevance of results of this study are limited to the physical education teacher preparation program at Southern Connecticut State University and the current version of the Praxis II Examination.

Chapter 4

RESULTS

Results are presented for each of the five procedures used in the project. The five procedures were (a) analysis of literature, (b) establishment of criteria by the formative committee, (c) determination and implementation of data collection procedures, (d) analysis of data, and (e) summative committee evaluation of findings.

Analysis of Literature

The results of the critique of the literature yielded three significant concepts related to this project. First, the literature supported the need to help students to succeed in passing the certification examinations in order to be job-ready at the conclusion of the program of studies. Second, the learning of test-taking skills that are specific to the types of examinations the candidates must take are beneficial in allowing students to demonstrate the extent of their content knowledge and analytical abilities. Third, assessment of program validity and effectiveness, as well as student learning, is fundamental to program improvement.

Through the process of gathering, summarizing, and reviewing literature, several issues surfaced for discussion within the formative committee; for example, ethical concerns were raised in some of the literature regarding the teaching of testing sophistication as a way of students' test performance exceeding their actual knowledge (Devine, 1989, Scruggs & Mastropieri, 1992).

Establishment of Criteria

Criteria was established for the evaluation of the study program. The criteria was based on information derived from the literature review and input from the formative committee. The formative committee established that the criteria for evaluating the program for both content validity and effectiveness should include the implementation of a participant questionnaire, which was identified through the literature search (See Appendix J). The validity of the content and instructional delivery methods of the study program would be evaluated on the basis of accepted teaching practice in higher

education, principles of adult education, and student feedback and perceptions of the program. Professor Duke provided expertise in regard to the content validity of the program on the basis of her views of accepted teaching practice in higher education and her experience as a professor in a teacher preparation program in which students must take the Praxis II (in another content area) in order to be certified. Assistant Dean Whelan provided input in the development of criteria for the evaluation of the content validity of the study program on the basis of her expertise and experience as dean in the Continuing Education and Extended Learning Department and as a doctoral student in the field of adult education. Mr. Hauser provided important input from the perspective of study program participant, test-taker, and soon-to-be-teacher. In addition to data gathered through the participant questionnaire, the effectiveness of the program in improving the pass-rate on the examinations would be evaluated on the basis of statistical data. A copy of the formative committee history of activity is included in the appendix section of this report (See Appendix H).

Data Collection

Data on the effectiveness of the study program in improving the pass-rate on the examinations was collected from the score reporting forms that are on file in the School of Education, and the sign-in sheets for each session of the study program. The participant questionnaire (See Appendix J) was used to collect data on students' perceptions of the usefulness of the content and effectiveness of instructional techniques and materials used to present the program. The study program outline and supplemental materials used in the presentation of the study program were distributed to committee members (See Appendix D).

Analysis of Data

The data collected from the score reporting forms and the participant questionnaires was tallied and provided to the formative committee (See Appendix K). The formative committee analyzed the data by comparing the pass-rate of program participants with the pass-rate of non-participants during the same

time period, as well as the pass-rate of program participants with that of the pass-rate of all test-takers for the same time period. The results of the statistical data are presented in Table 1. The analysis of data collected on the participant questionnaires consisted of looking at the overall numerical ratings for each question as well as looking for patterns in comments and suggestions included by participants on the questionnaires. In the final analysis, the data provided support for the effectiveness of the program both from the participants view as well as from the perspective of its probable impact in improving the pass-rate on the examinations. The formative committee unanimously concluded that the contents of the study program were valid based on their expertise and experiences, the literature that was provided, and the perceptions of participants who have completed the program.

Table 1

Pass-Rate of Study Program Participants and Non-Participants

The 5-session study program has been conducted 3 times during the 1998-99 academic year.

18 students have participated in the program during the year.

16 program participants passed both examinations on their first try following their completion of the study program.

Program participants	Sept. 1998 - June 1999:	16/18 passed = 88% pass rate
Non-participants	Sept. 1998 - June 1999:	7/13 passed = 54% pass rate
All test-takers	Sept. 1998 - June 1999:	23/31 passed = 74% pass rate
All test-takers	Sept. 1994 - June 1999	56/88 passed = 64% pass rate

Summative Committee Review

The findings and recommendations of the formative committee were reviewed by the summative committee for validation purposes, using criteria established through ongoing dialog between the researcher and summative committee members. Dr. Lobosco, program planner and evaluation consultant, provided guidance in the development of validation criteria for this stage of the study. Dr. Morley, Assistant Professor in a similar physical education teacher preparation program at another university, evaluated the study by providing input from her experience in having recently participated in an accreditation self-study of her university's program. She provided guidance from her perspective as Scholar-in-Residence with the BEST (Beginning Educator Support & Training) program. Barbara Westwater, consultant for Physical Education and Health Education in the Bureau of Teaching Standards and Instruction at the Connecticut State Department of Education provided resources and input regarding the Connecticut content standards and teaching standards for professional educators. She provided

guidance from her perspective as the coordinator of the BEST (Beginning Educator Support & Training) program.

The committee concurred that the formative committee's findings were consistent with criteria previously established to determine the validity and effectiveness of the program, and that that there was sufficient evidence to support the content validity and effectiveness of the study program. Recommendations were made regarding revisions to the planned program of studies as a result of information that was gathered in the process of conducting the study of the test preparation program. Committee members compared Praxis II descriptive material with the physical education teacher preparation planned program of studies, and recommended that the upcoming process of accreditation self-study precipitate the alignment of (CSDE)Connecticut State Department of Education teaching standards, CSDE and NASPE content standards, and standards-driven revision of the planned program of studies.

Committee members made several recommendations regarding ways to maximize the results of the study. It was recommended that the results of the study be given to the Exercise Science Department Curriculum Committee (a committee member provided several articles on the topic of the role of effective curriculum committees), and to the Dean of the School of Education. The committee recommended that the statistical evidence of the effectiveness of the program be made as widely known as possible, and encouraged the researcher to pursue publication of an article describing it. One committee member encouraged the submission of the study for presentation at *Evaluation '99*, the national conference of the American Evaluation Association, in order to call attention to effective methods of raising teacher certification test scores. The committee concurred with the recommendation of the formative committee that the program continue to be provided, and also concurred that evaluation and adjustment/revision of the curriculum should be ongoing. A copy of the summative committee history of activity is included in the appendix section of this report (See Appendix I).

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Chapter 5

DISCUSSION, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Discussion

The idea for the test preparation study program evolved from the concept of forming student-initiated study groups for various courses and students pursuing independent study. It seemed that a high proportion of students were unsuccessful in passing the Praxis II Examinations in time to receive their Initial Educator Certification in time to be job-ready at the start of the semester following the completion of their degree requirements. In fact, some students were unsuccessful in passing the examinations on several successive attempts despite participating in test preparation study groups.

In an attempt to assist students in passing the Praxis II, a faculty member collected information from students, ETS, recent graduates, and faculty members in order to gain an understanding of the Praxis II Examinations and the problem of students not passing the exams. The faculty member offered to meet with students, on a voluntary basis, to share with them what was known about the Praxis II exams. Former students who had been successful on the exams were asked to share their preparation strategies and test-taking experiences with the groups.

The faculty member devised a study prescription and, in order to field test that prescription, followed it in studying for the exams, registered for and took the examinations under the same conditions as the students. It was determined by the faculty member that the prescription was in some ways effective and in some ways ineffective, and made adjustments accordingly. The most valuable part of the field test was, however, the test-taking experience. The faculty member recognized specific conditions in the test-taking environment, and specific skills for managing the test formats that would benefit test-takers if prepared for in advance. The authentic test-taking experience, in its entirety - from figuring out how to decipher the test information bulletin right through to waiting for scores in the mail and interpreting the score reporting form - directly influenced the development of the study program content and instructional strategies.

In theory, the test preparation program for the Praxis II Examinations is the planned program of studies in physical education teacher preparation. The rate of success on the examinations might be viewed as a measure of evaluation of the planned program at SCSU. However, the present planned program does not require courses in all of the areas of study that are included on the test. For example, students are required to take only one of the following: exercise physiology, motor learning, or sport psychology. The examination contains a significant number of questions on each of these areas of study. Students are encouraged to take all of the elective courses for which it is known that content knowledge will be tested on the certification exams, but all students do not elect to take all of the courses. Therefore, an argument can be made for providing a more content-specific study program for test preparation. The fact remains that students are made aware, throughout their program of studies, that the Praxis II Examinations include a high proportion of questions on the areas of study of the optional courses. Supplemental study sessions are arranged in response to student need to review specific content, and therefore specific content in specialized areas of study is not included in the study program curriculum. It is not desirable, however, to create the impression that a review session is a substitute for a semester-long course.

The field-testing of the study prescription by the program developer under authentic testing conditions was expected to prove useful. Its usefulness was anticipated in the respect that the study strategies would be tested against the content of the examinations. While the field-test was indeed useful in this regard, the greatest value of the program developer's experience was recognized when it was revealed that a faculty member actually experienced the complete process that the students are required to undergo. As a result of the authentic experience, the faculty member could not only inform and guide students through the process of registering and studying for the examinations, and waiting for and interpreting results; the study program developer could identify with the stresses and anxieties of the students, and could understand the effects of the testing conditions the students would encounter. This set

of experiences helped the program developer to identify realistic skills that were important for success in the test-taking process.

Methodological issues are encountered when attempting to evaluate a college course's effectiveness by determining whether students who enroll in it perform at higher levels that students who did not enroll. The research purpose must be clearly defined in order to determine the parameters and methods that will be used in the study. Of the four basic research models, the two that were considered for use in determining the effectiveness of the study program were the post-facto design and the time series design. The post-facto design was considered for a comparison of the pass-rate of the treatment group (students participating in the study program) with the pass-rate of the group consisting of everyone else who did not participate in the program during the same time period. The time series design was considered for a comparison of the pass-rate of the treatment group with the pass-rate of the group consisting of all students who have taken the examination , during two periods of time - before the study program was available and after the program was available. Several variables may have affected the pass-rate of students during the four years in which the Praxis II Examinations have been required, such as differences in the student population, changes in faculty, changes in course content and presentation, and overall differences in the teacher preparation program. Therefore, the ex post facto design was used to analyze the statistical data. That is, the pass-rate of the treatment group (students participating in the study program) was compared with the pass-rate of the group consisting of everyone else who did not participate in the program during the same time period. During the time period from September 1998 to June 1999, 16 of the 18 students who participated in the study program passed both Praxis II exams on their first try following completion of the program. The pass rate of that group was 88%. Of the 13 students who did not participate in the study program, 7 passed. This group's pass-rate was 54%. The participant group's rate of 88% exceeds the 74% pass-rate of the combined group of all test takers during that time period.

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Conclusions

The answer to the research question, "Is the study program valid in its objectives, content and methodology for the purpose of preparing the students to succeed in passing the Praxis II Examinations?" was determined by a review of the literature, collection of data from students, and input from the formative committee. It was concluded that the objectives, content and instructional methods of the test preparation study program were valid based on the skills identified by the program developer and acceptable teaching practices in higher education.

The answer to the second research question, "Are students who have followed the study program passing the examinations?" was determined by collecting data on the examination pass-rate of students who have participated in the study program and comparing it with the pass-rate of students who did not participate in the program during the same time period. It was concluded from this comparison that more participants that non-participants are passing the examinations; therefore, the second research question is answered in the affirmative.

Implications

Educational Testing Service researchers conducted a study of teachers' skills and the impact of raising standards for teachers (Gitomer & Latham, 1999). In the study, ETS examined the potential impact of raising required passing scores on the Praxis tests. Raising those scores would, indeed, significantly raise the average admissions score of those who pass with higher standards, the researchers concluded. However, far fewer candidates would pass those assessments, and the impact would be greater for minority groups. "States face some difficult choices as they grapple with the issue of teacher shortages," the researchers say, "and with a teacher population that does not come close to reflecting the diversity of the students in the educational system" (Gitomer & Latham, p.2). In light of the prospect of higher test score requirements, it will be especially critical to assist students in demonstrating the extent of their content knowledge.

The process of conducting the study required close review of the planned program of studies and encouraged dialog among committee members, which helped to raise awareness of the misalignment between the present planned program of studies and the current state-of-the art in standards-based curriculum development in teacher preparation. This is an especially timely development in view of the accreditation self-study that is to be conducted during the upcoming year.

It is anticipated that the results of the study will be used to improve the services provided to the students in the physical education teacher program. As the effectiveness of the study program in raising the pass-rate on Praxis II becomes known, it will likely become a regular offering to students, therefore ensuring that students have the opportunity to learn to use it. Since the study program is not expected to be offered for credit to either faculty or students, and there is no reason for a fee to be charged. That a service will be available to students, on a regular basis, will be good for public relations within the student population, and this development can potentially motivate teacher preparation programs within the School of Education to develop and provide similar services.

Another anticipated benefit is that an increased proportion of graduates of the teacher preparation program will be qualified to enter the teaching profession earlier following the completion of their preparation programs. The results of this study may be included in the review of the School of Education and the teacher preparation program. A potential increase in the rate of completion of all initial teacher certification requirements will improve the reputation of the university as a teacher preparation institution, and therefore increase the probability of placing graduates in new teaching positions throughout the state.

Educational practice at SCSU should be improved because it is expected that the test preparation study program will become a regular component in the teacher preparation continuum at SCSU. However, the Connecticut State Department of Education Bureau of Teacher Certification and the Department of Higher Education continually monitor the certification requirements for teachers as well as national trends and practices in teacher preparation. There is no guarantee that the current teacher

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certification requirements will not change in the near future. The physical education teacher preparation program at SCSU is preparing for its NCATE accreditation self-study during the 1999-2000 academic year, and is currently reviewing its planned program of studies. The national trend toward standards-based curriculum development will undoubtedly impact the planned program revision. The implications of this trend include the need for planning and implementation of ongoing evaluation of all aspects of the planned program of studies including the test preparation study program.

Recommendations

The summative committee has made two significant recommendations specifically with regard to the test preparation study program. First, it is recommended that, in addition to the *Content and Process Evaluation* that was used to survey participants about their perceptions of the program, evaluations of individual sessions be used in order to more specifically evaluate the content of the program on an ongoing basis. Second, it is recommended that the physical education teacher preparation program review its planned program in physical education teacher preparation and its alignment with the Connecticut Standards for Professional Educators as part of the upcoming accreditation self-study.

Committee members made several recommendations regarding ways to maximize the results of the study. It was recommended that the results of the study be given to the Exercise Science Department Curriculum for its use in the teacher preparation program self-study and in the planned program revision, and to the Dean of the School of Education. The committee recommended that the statistical evidence of the effectiveness of the program be made as widely known as possible, and encouraged the researcher to pursue publication of an article describing it. The submission of the study for presentation at the national conference of the American Evaluation Association was recommended, in order to call attention to effective methods of raising teacher certification test scores. The summative committee concurred with the recommendation of the formative committee that the program continue to be provided.

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APPENDIXES

A *Step-by-Step Guide to*

The Praxis Series:
Professional Assessments for Beginning Teachers

Step 1 . . . . . Understand What The Praxis Series Is All About

Step 2 . . . . . Understand Testing Requirements

Step 3 . . . . . Understand Passing Scores

Step 4 . . . . . Understand Test Formats and Types of Questions

Step 5 . . . . . Understand Test-Taking Strategies for These Tests

Step 6 . . . . . Understand How Test Preparation Can Help You

Step 7 . . . . . If You Must Repeat a Test in The Praxis Series

STEP 1

Understand What The Praxis Series Is All About

Purpose

Teachers are entrusted with the education of the next generation. Because their task is so pivotal, the public demands that teachers be held to the highest professional standards. Legislators and licensing boards in most states have responded by establishing licensing programs to evaluate each teacher candidate's basic academic skills, subject knowledge, knowledge of teaching methods, and classroom performance.

The Praxis Series was developed to provide a system of thorough, fair, and carefully validated tests and assessments for states to use as part of this teacher licensure process. Some tests in the series are also used by colleges and universities to ensure that students entering teacher education programs have sufficient grounding in basic academic skills. In addition, some tests in the series are used by professional associations or organizations as one of several criteria for certification. Another component of the series is an in-class observation system used to mentor and train student and beginning teachers.

Three Levels of Assessments

The three categories of assessments in The Praxis Series correspond to the three milestones in your development as a teacher: entering a teacher training program, graduating from college and entering the profession, and your first year of teaching.

Praxis I: Academic Skills Assessments are designed to be taken early in your college career to measure your reading, writing, and mathematical skills. The assessments are available in two formats, each measuring the same academic skills vital to all teacher candidates.

- The paper-based Pre-Professional Skills Tests (PPST™) in Reading, Mathematics, and Writing are each one-hour multiple-choice tests. The Writing test also includes a 30-minute essay.
- The computer-based Academic Skills Assessments (CBT) cover the same material but are tailored to each candidate's performance level. They also offer a wider range of question types, provide immediate scores in reading and mathematics, and are available on demand throughout the year by appointment, eliminating the need to register in advance. The tests are given at a network of more than 300 sites, including Sylvan Technology Centers, ETS field service offices, and selected college and university centers. The tests are administered on IBM or compatible PCs with a mouse. For detailed information about computer-based testing, please consult the *Registration Bulletin* or the ETS website.

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Praxis II: Subject Assessments measure your knowledge of the subjects you will teach. They also measure your general and subject-specific pedagogical skills and knowledge. In many subject areas The Praxis Series offers several different tests so that states can select the tests that best meet their requirements.

The Praxis II: Subject Assessments include:

- Core Battery Tests (General Knowledge, Communication Skills, Professional Knowledge)
- Subject Assessments/Specialty Area Tests
- Multiple Subjects Assessment for Teachers (MSAT). These tests were developed jointly by ETS and the California Commission on Teacher Credentialing and are administered under Praxis II Assessments.
- Principles of Learning and Teaching Tests. These assessments use a case study approach to measure your general pedagogical knowledge at three grade levels: K-6, 5-9, and 7-12. The tests feature short answer essays and multiple-choice items.

Praxis III: Classroom Performance Assessments are used to evaluate all aspects of beginning teacher's classroom performance. Designed to assist in making licensure decisions, these comprehensive assessments are conducted in the teacher's own classroom by trained local observers who employ a set of consistent, reliable, nationally validated criteria. The assessment is typically administered during the first year of teaching, although under special circumstances it may take place during the second year.

How the Tests Are Developed

The Praxis Series assessments reflect the most current research and professional judgment and experience of educators across the country. Each test is developed with the assistance of an advisory committee composed of teachers and higher education faculty who teach in that field and work in close collaboration with test development staff of Educational Testing Service. Before any new test format is established or any test questions are written, a thorough job analysis is conducted to determine what knowledge and skills are important to beginning teachers in that field.

Every test is reviewed for accuracy, fairness, and relevance many times during its development. After a test is administered, but before scores are released, each question undergoes rigorous statistical analysis to further ensure that it is accurate, comparable to previous tests, and fair to subgroups of test takers. These procedures meet and exceed the exacting standards of the professional measurement community.

Tests in The Praxis Series are continually updated and improved to provide valid, reliable information that schools, states, and professional associations and organizations need to make their decisions.

What The Praxis Series Tests Can and Cannot Measure

The Praxis Series tests are designed to measure your general and specific academic skills, your knowledge of the subject or discipline you plan to teach, and your pedagogical knowledge. Each test in The Praxis Series is designed to be comprehensive and inclusive but is limited to what can be covered in a finite number of questions. The Praxis Series tests cannot demonstrate your total knowledge of a subject or everything you know about teaching; nor can your scores on Praxis Series tests predict how good a teacher you will be. The tests do, however, help a state ensure that its beginning teachers have an adequate level of knowledge.

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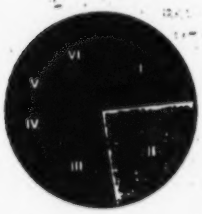
Appendix B

Physical Education: Content Knowledge (0091)

Test at a Glance

Test Name	Physical Education: Content Knowledge
Test Code	0091
Time	2 hours
Number of Questions	120
Format	Multiple-choice questions



Content Categories	Approximate Number of Questions	Approximate Percentage of Examination
I. Fundamental Movements, Motor Development, and Motor Learning	29	24%
II. Movement Forms	29	24%
III. Fitness and Exercise Science	23	19%
IV. Social Science Foundations	13	11%
V. Biomechanics	10	8%
VI. Health and Safety	16	14%

About this test

The Content Knowledge test in Physical Education is designed to measure the professional knowledge of prospective teachers of physical education in elementary through senior high schools. The test assesses whether an examinee has the knowledge and competencies necessary for a beginning teacher of physical education.

The 120 multiple-choice questions cover knowledge of fitness, fundamental movements, and sports that comprise the content of physical education classes; knowledge of areas in the natural and social sciences that provide the foundation for teaching these activities; and knowledge of crucial topics in health and safety. Knowledge of these subject areas enables teachers to understand the nature and purpose of the activities in the physical education curriculum; to evaluate and interpret the physical characteristics and performances of students in physical education classes; and to make decisions about the ongoing conduct of physical education classes and the needs of students in those classes. Questions will test knowledge of essential facts, including the meaning of terms and placement of content elements in proper categories; understanding of relationships between and among areas of content; and the ability to apply concepts appropriately.

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Topics Covered

Representative descriptions of topics covered in each category are provided below.

I. Fundamental Movements, Motor Development, and Motor Learning
- Fundamental movements: locomotor, nonlocomotor, manipulative, and falling/landing movement skills; movement concepts such as body, space, effort, and relationship
- Growth and motor development: role of perception in motor development, such as in spatial movement relationships; neurophysiology of motor control; effects of maturation and experience on motor patterns; biological and environmental influences on gender differences in motor performances
- Motor learning: classical and current theories of motor learning; variables that affect learning and performance; effects of individual differences on learning and performance

II. Movement Forms
- Dance and rhythmic activities: dance forms, such as folk, square, and aerobic dancing; skill analysis of dance movements
- Gymnastics: stunts and tumbling, use of gymnastic apparatus, movement themes in educational gymnastics
- Games: game forms, including invasion games; cooperative and competitive games; analysis of skills, rules, and strategies of particular games
- Individual/dual/team sports: analysis of skills, injury prevention and safety, rules and strategies, facilities and equipment, lifetime activities and recreational pursuits, adventure and outdoor pursuits, and the martial arts; emphasis is on basketball, soccer, softball, tennis, track and field, and volleyball

III. Fitness and Exercise Science
- Components: cardiorespiratory and muscular endurance, body composition, flexibility
- Conditioning practices and principles: frequency, intensity, time/duration, the role of exercise
- Human biology: anatomy and physiology, including identification of major muscles, bones, and systems of the human body and their functions; exercise physiology, including terminology, components of fitness, principles of exercise, roles of body systems in exercise, short- and long-term effects of physical training, relationship between nutrition and fitness

IV. Social Science Foundations
- History of physical education: leading men and women, major issues, and events in the history of physical education; historical relationship of physical education to health and fitness
- Current philosophical issues: purpose of physical education; relationship between teaching and coaching; accountability; roles, benefits, and effects of competition
- Sociological and sociopolitical issues: cultural diversity, equity (Title IX, Individuals with Disabilities Education Act, affirmative action), general educational issues
- Psychology: personality factors that affect participation, social-psychological factors that affect participation, cooperation

V. Biomechanics
- Terminology: mass, force, friction
- Basic principles of movement: summation of forces, center of gravity, force/speed relations, torque
- Application of basic principles to sports skills
- Methods of analysing movement
- Analysis of basic movement patterns: overhand throw, underhand throw, kick

VI. Health and Safety
- Safety and injury prevention: general and specific safety considerations for all movement activities; fitness-related safety considerations, such as warm-up/cool down, harmful exercise techniques, and environmental conditions
- Health appraisals and referrals: health-related fitness appraisals, personal goal-setting and assessment, such as Physical Best, President's Challenge, and Fitnessgram; considerations related to the Individuals with Disabilities Education Act
- Handling accidents and illnesses: first aid, CPR, water safety, certification
- Liability and legal aspects: considerations of equipment, class organization, supervision, program selection
- Effects of substance abuse on performance and behavior

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Sample Test Questions

Physical Education: Content Knowledge (0091)

The sample questions that follow illustrate the kinds of questions in the test. They are not, however, representative of the entire scope of the test in either content or difficulty. Answers with explanations follow the questions.

Directions: Each of the questions or statements below is followed by four suggested answers or completions. Select the one that is best in each case.

1. In which of the following locomotor skills does each foot have two tasks to complete before the weight is transferred to the other foot?

   (A) Galloping
   (B) Running
   (C) Walking
   (D) Skipping

2. Which of the following is most characteristic of the primitive stage of forward rolling?

   (A) Keeping the chin tucked
   (B) Keeping the knees and hips flexed
   (C) Losing the curl
   (D) Using the hands to cushion the head contact

3. All of the following are characteristics of a correct mature form for striking a ball with a racquet EXCEPT

   (A) taking a forward step with the foot opposite to the striking arm
   (B) coiling and rotating the body forward as the racquet is swung
   (C) putting weight on the back foot and then shifting to the front foot as the racquet is swung
   (D) stopping the racquet at the point of contact with the ball

4. When dribbling a soccer ball in a restricted space, the player should attempt to do all of the following EXCEPT

   (A) keep the ball close to the feet
   (B) stay in a slightly crouched position
   (C) use body feints and changes of speed
   (D) use only the dominant foot for better control

5. It is reputed that Milo of Greece lifted a newborn bull onto his shoulders each day until the bull became fully mature. Milo followed what two principles of modern muscle strength and endurance conditioning?

   (A) Progression and overload
   (B) Variable resistance and overload
   (C) Frequency and progression
   (D) Intensity and retention

6. In which of the following lists is each physiological factor linearly (proportionately) related to oxygen consumption?

   (A) Cardiac output, diastolic blood pressure, heart rate
   (B) Cardiac output, heart rate, work rate
   (C) Core temperature, red blood cell count, work rate
   (D) Minute ventilation, red blood cell count, respiration rate

7. In the late 1800's, the greatest influence on the direction of physical education came from individuals with a background in which of the following?

   (A) Medicine
   (B) Professional sport
   (C) Intercollegiate sport
   (D) The military

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Question 3 refers to the following quotation by Coakley (1990) regarding the nature of sport.

"The transformation of a competitive physical activity into a sport generally involves the standardization and enforcement of rules, an emphasis on organization, and formalized skill development. In other words, the activity becomes patterned and regularized... Once competition and organization become part of the setting in which the activity takes place, it becomes a sport. The recent histories of Frisbee competitions, judo, bodybuilding and motorcycle racing are all classical examples of how this occurs."

8. The process described in this quotation is most nearly one of

(A) idealization
(B) institutionalization
(C) masculinization
(D) professionalization

9. Angular motion is represented by which of the following?

I. The knees of a cyclist
II. The legs of a runner
III. The arms of a swimmer

(A) I only
(B) III only
(C) I and II only
(D) I, II, and III

10. The correct racing posture of a swimmer, a cyclist, or a downhill skier minimizes the effect of

(A) lift
(B) propulsion
(C) turbulence
(D) gravity

11. Which of the following practice alternatives would best promote motor learning and safety for potentially injurious sports such as pole vaulting and downhill skiing?

(A) Whole
(B) Part
(C) Progressive-part
(D) Distributed

12. All of the following are direct physiological consequences of warm-down (cool-down) activities following vigorous physical activity EXCEPT

(A) preventing blood from pooling in the legs
(B) increasing the rate of lactic acid removal from the blood and skeletal muscle
(C) promoting the reduction of cholesterol in the blood
(D) reducing the risk of cardiac irregularities

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Appendix C

Physical Education: Movement Forms — Analysis and Design (0092)

Test at a Glance

Test Name	Physical Education: Movement Forms — Analysis and Design
Test Code	0092
Time	1 hour
Number of Questions	2 multipart essay questions
Format	Each essay question requires the examinee to describe characteristics of movement forms, to design or prescribe appropriate movement routines to achieve specific goals, and to provide explanatory information

About this test

The Movement Forms – Analysis and Design test in Physical Education is intended to assess how well a prospective teacher of physical education can select activities for particular purposes, make decisions about the status and needs of students, and provide explanation for these selections and decisions. The test covers knowledge of fitness, fundamental movements, and sports that comprise the content of physical education classes; knowledge of the foundations for teaching these activities; and knowledge of crucial topics in health and safety. The test is intended for both men and women who plan to teach physical education from kindergarten through grade 12. Examinees typically have completed a bachelor's degree program in physical education.

The test contains two questions. They deal with health-related fitness, the ability to analyze movement forms in terms of the progression from introductory to advanced levels of skill performance, and the selection and description of movement activities that will enable children to reach specified goals in physical education. Examinees are expected to demonstrate knowledge of the critical features of movement forms and how these features shape the design of activities intended to help children master these features. Examinees will not be expected to demonstrate knowledge of teaching methods in physical education or of general principles and methods of planning and implementing instruction. Across the test questions, examinees will describe characteristics of movement forms; design and/or prescribe appropriate movement routines to achieve specific goals; and provide explanatory and justifying information on content topics from the foundations of physical education, as well as health and safety issues. Question content also includes concepts relating to motor skill performance and fitness, including fundamental movements, movement forms, and fitness as described in the Physical Education: Content Knowledge Test 0091.

Several documents published by the National Association for Sport and Physical Education (including *Outcomes of Quality Physical Education Programs*) have been used in preparing the test questions. This publication and other related publications may be obtained from AAHPERD Publications by calling the following number: 800-321-0789.

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Sample Test Questions

Physical Education: Movement Forms — Analysis and Design (0092)

This section presents a sample question and constructed-response samples along with the standards used in scoring the essays. When you read these sample responses, keep in mind that they will be less polished than if they had been developed at home, edited, and carefully presented. Examinees do not know what questions will be asked and must decide, on the spot, how to respond. Readers take these circumstances into account when scoring the responses.

Each part of the response will be scored according to the following scoring guide, resulting in a total score of 0-18.

SCORING GUIDE

3

Demonstrates a strong understanding of the principles of physical education and their appropriate application

2

Demonstrates an adequate understanding of the principles of physical education and their appropriate application

1

Demonstrates very little understanding of the principles of physical education and their appropriate application

0

Demonstrates no understanding of the principles of physical education and their appropriate application

Sample Question

Given below are scores for two students on the Physical Best health-related fitness tests.

STUDENT 1: 14-year-old girl		STUDENT 1: 14-year-old boy	
One-Mile Walk/Run	13:00	One-Mile Walk/Run	9:30
Sum of Skinfolds	13	Sum of Skinfolds	30
Sit & Reach	20	Sit & Reach	20
Sit-up	24	Sit-up	40
Pull-up	1	Pull-up	0

The following tables display the Physical Best Health Fitness Standards.

Table 1
Health Fitness Standards
Girls

Age	Test Item					
	One Mile Walk/Run (minutes)	Sum of Skinfolds (mm)	Body Mass Index	Sit & Reach (cm)	Sit-up	Pull-up
5	14:00	16-36	14-20	25	20	1
6	13:00	16-36	14-20	25	20	1
7	12:00	16-36	14-20	25	24	1
8	11:30	16-36	14-20	25	26	1
9	11:00	16-36	14-20	25	28	1
10	11:00	16-36	14-21	25	30	1
11	11:00	16-36	14-21	25	33	1
12	11:00	16-36	15-22	25	33	1
13	10:30	16-36	15-23	25	33	1
14	10:30	16-36	17-24	25	35	1
15	10:30	16-36	17-24	25	35	1
16	10:30	16-36	17-24	25	35	1
17	10:30	16-36	17-25	25	35	1
18	10:30	16-36	18-26	25	35	1

Table 2
Health Fitness Standards
Boys

Age	Test Item					
	One Mile Walk/Run (minutes)	Sum of Skinfolds (mm)	Body Mass Index	Sit & Reach (cm)	Sit-up	Pull-up
5	13:00	12-25	13-20	25	20	1
6	12:00	12-25	13-20	25	20	1
7	11:00	12-25	13-20	25	24	1
8	10:00	12-25	14-20	25	26	1
9	10:00	12-25	14-20	25	30	1
10	9:30	12-25	14-20	25	34	1
11	9:00	12-25	15-21	25	36	2
12	9:00	12-25	15-22	25	38	2
13	8:00	12-25	16-23	25	40	3
14	7:45	12-25	16-24	25	40	4
15	7:30	12-25	17-24	25	42	5
16	7:30	12-25	18-24	25	44	5
17	7:30	12-25	18-25	25	44	5
18	7:30	12-25	18-26	25	44	5

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Sample Test Questions

Physical Education: Movement Forms Analysis and Design (0092)

Use the information given about Student 1 and Student 2 and the tables to complete the following three tasks.

I. Identify the health component that is measured by each fitness test.

II. Briefly evaluate each student's fitness strengths and weaknesses and describe what you would say to each student to explain why he or she should be concerned about the evaluation.

III. Design an appropriate six-week fitness/exercise program for <u>one</u> of the two students.

- The exercise program should be for use in the student's physical education class and/or for the student's individual use outside of class time.
- The exercises should enable the student to improve in each fitness category in which the student scored below the fitness standard and to maintain or improve fitness in each category in which the student's score was in the acceptable range.
- Include in your design of the program a description of
  - the type of exercises
  - the frequency of exercises
  - the intensity of exercises
  - the duration of exercises
  - principles of training that are applicable to the program

Sample Response That Received a Score of 11:

I. A. One-Mile Walk/Run — Cardiovascular endurance
B. Skinfold —
C. Sit and Reach — Flexibility
D. Sit Up — Muscular Strength
E. Pull Up — Muscular Strength

II. A. Student 1
Cardiovascular — "Need some improvement in the 1-mile walk/run — 13 min is a little too high for your age"
Skinfold — "Really low you must eat healthy"
Flexibility — "Pretty good — may want to work on stretching exercises."
Sit up — "need to increase amount of sit ups every day — a little more each day"
Pull ups — "Doing fine on pull ups — could increase number if work on it"

B. Student 2
Cardiovascular — "need to improve in 1-mile walk/run — somewhat slow"
Skinfold — "too high for age"
Flexibility — "pretty well but could improve by doing stretch exercises"
Sit up — "did very well on sit ups"
Pull ups — "need to work on muscular strength activities"

III. 6-WK PROGRAM — Student 2
Phys. Educ. Class — Encourage to eat healthier — less fat in diet — good luck!
Mon. — cardio — jog track — 1 mile flex. — touch toes 10 sec., stretch to side 10 sec. sit up — 40 situps
Tues. — cardio — 5 sprints — 2 lengths of basketball court flex. — stretching — touch toes for 10 sec. stretch quadriceps for 10 sec. pull up — flexed arm hang — hang for 10 seconds
Wed. — cardio — run 1/2 mile in 5 min. flex. — touch toes for 10 sec. situps — increase to 45
Thursday — cardio — run 1 mile in 9 min. flex. — touch toes, stretch to side pull ups — flexed arm hand — 10 sec.
Fri. — cardio — sprint 5 times — 2 basketball lengths flex. — quad. stretch, touch toes sit ups — 45
Slowly increase in every area

<u>2nd wk</u>
cardio — 1 mi = 9 min., sprints = 7 flex. — hold for 15 sec. sit ups — 50 pull ups — 20 sec

<u>3rd week</u>
cardio — 1 mi = 8.5 min., sprints = 7 flex. — 15 sit ups — 55 pull ups — 1 pull up

<u>4th wk</u>
cardio — 1 mi. = 8 min., sprints = 8 flex. — 20 sec. sit ups — 55 pull ups — 1

<u>5th wk</u>
cardio — 7.5, 9 sprints flex. — 25 sec. sit ups — 60 pull ups — 2-3

<u>6st wk</u>
cardio — 7, 10 sprints flex. — 30 sec. sit ups — 65 pull ups — 3-4

He is not to full standard but has increased slowly and with improvement and success, can't expect too much, but definite improvement.

Skinfold should be better because with healthier diet and increase in exercise = healthier body.

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Appendix D

TEST PREPARATION STUDY PROGRAM
OUTLINE

The Praxis II Test Preparation Study Program is a seminar and workshop format, which meets five times with groups of students who are planning to take the Praxis II Examinations in Physical Education Content Knowledge (0091) and Physical Education: Movement Forms - Analysis and Design (0092) in the foreseeable future. Students attend voluntarily. Sessions are one hour in length, except for Session 3, which is a 2-hour simulated test. There is no fee for participation in the study program, and no academic credit is awarded. The instructor, who has taken the Praxis II Examinations and developed the program, provides the study program voluntarily. No teaching credit is awarded.

SESSION 1

Description of the Praxis II Examination
- Purpose
- Requirements
- Background information and brief history
- Examination format

Distribution of ETS materials
- Information booklets (ETS)
- Tests-at-a-Glance Booklets pertaining to the physical education examinations

Introduction of sample questions, provided in the ETS test information materials

Introduction of suggested study materials
- For Content Knowledge Examination (0091):
  - Foundations of Physical Education and Sport (Bucher & Wuest) textbook used in EXS 191 freshman year introductory course
  - Other similar texts
- For Physical Education: Movement Forms - Analysis and Design (0092):
  - AAHPERD Physical Best Individual Physical Fitness Programming Guide

Distribution of sample examinations
- Multiple choice content knowledge examinations (answers provided at back of exam)
- Constructed response questions

Assignment for next session:
- Take one or more of the multiple choice content knowledge examinations, with no time limit, and check answers
- Categorize questions answered incorrectly as follows:
  1. fundamental movements, motor development, motor learning
  2. movement forms
  3. fitness and exercise science
  4. social science foundations
  5. biomechanics
  6. health and safety
- Identify weak areas (above) and focus review on these areas

SESSION 2

Panel of previous test-takers to describe their test-taking experiences
- Registration process
- Preparation and study process
  - Materials and sources that were particularly helpful
- Test Day experiences, prior and on-site, what to expect at the testing center
- Problems, distractions, frustrations
- Strategies and other suggestions

Review of assignment from previous session
- Identification of strengths and weaknesses

Test-taking strategies
- Op-Scan answer sheets, AKA: bubble sheets
  - Strategies for using
  - Distribute several to each participant for practicing
- Time management strategies
- Preparation the night before, and morning of
- Getting and staying "in the zone" - strategies for tuning out distractions

Assignment for next session
- Continue review of weak areas
- Meet for practice test - 2-hour session
  - Take NTE practice multiple choice exam (distribute) under test-taking conditions (time limit, using bubble sheet)

SESSION 3 - 2 hours

Practice test, using NTE multiple choice examination
Simulate actual testing conditions - 120 questions, time limit 120 minutes, bubble answer sheets
Allow test-takers to take exam, answer sheets and answers home

SESSION 4

Share experiences from simulated testing session
Discuss Physical Education: Movement Forms - Analysis and Design (0092) AKA: essay exam
Review sample questions
- Refer to AAHPERD Physical Best guide
  - Identify key points to include in constructed response to Question 1
  - Discuss possible variations in presentation of question
- Refer to course journals for EXS 394, EXS 483, and EXS 495 instructional methods courses for sequencing of instruction
  - Identify key points to include in constructed response to Question 2
  - Discuss possible variations in presentation of question

Assignment for next session
- Construct responses to sample essay questions
  - No time limit
  - Construct responses to variations of questions discussed
  - Use outline and charting/matrix formats with brief introductions

Bring responses to next session to share with the group

SESSION 5

Share constructed responses
Peer and instructor assessment according to previously established criteria
Share study and test-taking strategies
Suggestions from group and instructor
Encourage group members to participate in the panel discussion (Session 2) after they have taken the examinations to share their experiences with others
Encourage participants to provide feedback to instructor regarding the study program

Resources used in the preparation of the study program:

Loulou, D. (1995) . Making the A: How to Study for Tests. ERIC Digest, ERIC Clearinghouse on Assessment and Evaluation.

Scruggs E. & Mastropieri, M. (1992) . Teaching test-taking skills. Purdue University: Brookline Books.

Rowntree, D. (1994) . Preparing materials for open, distance and flexible learning. London: Kogan Page Publishers.

Brown, G. & Atkins, M. (1988) . Effective teaching in higher education. New York, NY: Metheun Publishers.

Armstrong, W. (1995) . Study is hard work. Boston: David R. Godine, Publisher.

Lyman, H. (1998) . Test scores and what they mean. Boston: Allyn and Bacon.

Devine, T. (1988) . Teaching study skills. Boston: Allyn and Bacon, Inc.

Appendix E

FORMATIVE COMMITTEE

Dr. Suzanne Duke
Associate Professor
School Health Education Program
Southern Connecticut State University

Patricia Whelan
Assistant Dean
Department of Continuing Education
Southern Connecticut State University

William Hauser
Graduate Student
Physical Education Teacher Preparation Program
Southern Connecticut State University

Appendix F

SUMMATIVE COMMITTEE

Dr. Anna Lobosco
Program Planner / Evaluation Consultant
Developmental Disabilities Planning Council
New York State Department of Mental Retardation

Dr. Victoria Morley
Assistant Professor
Physical Education and Health Fitness Department
Central Connecticut State University

Barbara Westwater
Consultant for Physical Education and Health Education
Bureau of Teaching Standards and Instruction
Connecticut State Department of Education

Appendix G

NOVA SOUTHEASTERN UNIVERSITY

COMMITTEE CONSENT FORM

Title: EVALUATION OF A PREPARATORY STUDY PROGRAM FOR THE PRAXIS II CONTENT EXAMINATION FOR TEACHER CERTIFICATION IN PHYSICAL EDUCATION

Investigator: Jean Mee, Student, Programs for Higher Education, Nova Southeastern University

You are invited to participate in a research study to evaluate a preparatory study program for the Praxis II Content Examination for Teacher Certification in Physical Education. Your participation in the study will help to determine the validity of the contents and instructional design of the study program and its effectiveness in improving the pass-rate.

The risks involved in this study are the preservation of anonymity relative to the input given on the establishment of criteria which will be used to determine the validity and effectiveness of the study program and the method for collecting data. To address concerns of confidentiality, no names will be used in the final report.

The benefits of this study will hopefully contribute to the improvement of the services provided to the students in the physical education teacher program at Southern Connecticut State University. There are no financial consequences to the participants.

Participants may withdraw from the study at any time. Copies of the completed study will be made available to all members of the Teacher Preparation Program, the formative committee, and the summative committee.

FISCHLER CENTER FOR THE ADVANCEMENT OF EDUCATION • Programs for Higher Education
3301 College Avenue • Fort Lauderdale, Florida 33314-7796 • (954) 262-8530 • 800-986-3223, Ext. 8530 • Fax (954) 262-3903

I have read the preceding and I understand the contents. All of my questions concerning this research study have been answered. If I have any questions in the future about this study I will contact the investigator indicated above. A copy of this form will be given to me.

Signature of participant: _____ Date: _____
Signature of witness: _____ Date: _____

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Appendix H

FORMATIVE COMMITTEE HISTORY OF ACTIVITY

All members consented to serve on the committee through personal conversations, and each signed the Committee Consent Form. Two meetings were scheduled for the establishment of criteria for evaluation and analysis of data.

Committee members were provided, in advance of the first meeting:

- the purposes of the study:
    1. evaluate the program for content validity
    2. determine the program's effectiveness

- several evaluation models gathered through the literature search.
- test-taking skills information gathered through the literature search.
- the study program outline and supplemental materials used in presenting the program
- a description of the history of the development of the present program

At the first meeting, the committee members inquired about the evaluation methodology that was currently in place.

Present evaluation methodology consists of

1. monitoring informal student feedback
2. developer/instructor using the program to prepare for and take the Praxis II Exam
3. adjusting the program in response to #1 & 2

The committee established that the criteria for evaluating the program for both content validity and effectiveness should include a participant questionnaire. Several examples from the literature search were reviewed; the committee determined that the *Session Content & Process Questionnaire* (Caffarella, R., 1994. Planning Programs for Adult Learners. San Francisco: Jossey-Bass, p.129-130) would be modified slightly and would be used to gather data from program participants.

Committee members provided the following expertise:

Dr. Duke evaluated the content validity of the program on the basis of her views of accepted teaching practice in higher education and her experience as a professor in a teacher preparation program in which students must take the Praxis II (in another content area) in order to be certified.

Assistant Dean Whelan evaluated the content validity of the study program on the basis of her expertise and experience as dean in the Continuing Education and Extended Learning Department a doctoral student in the field of adult education.

Mr. Hauser evaluated the content validity of the study program on the basis of his coursework in pedagogy, instructional methods, previous participation in the study program, and his experience with taking the Praxis II Examinations, as well as feedback from his peers.

One member of the committee questioned the absence of review sessions on specific areas of study with which students have indicated having difficulty, such as motor learning, sport psychology, kinesiology, and exercise physiology. Another member, a previous program participant, explained that supplemental review sessions were scheduled on an as-needed basis, depending on need expressed by participants.

The committee requested statistical data supporting improvement in the pass-rate of students participating in the program compared with non-participants.

The 5-session study program has been conducted 3 tomes during the past year.
18 students have participated in the program during that year.
16 program participants passed both examinations on their first try following their completion of the study program.

Program participants	Sept 98-June 99:	16/18 passed = 88% pass rate
Non-participants	Sept 98-June 99:	7/13 passed = 54% pass rate
All test-takers	Sept 98-June 99:	23/31 passed = 74% pass rate
All test-takers	Sept 94-June 99	56/88 passed = 64% pass rate

Prior to the second meeting, the participant survey was conducted using the *Session Content & Process Questionnaire*, and results were tallied.

At the second meeting, results of the questionnaire were analyzed. The results were favorable to the content and process of the sessions and the program overall. For a tally of data collected on the questionnaire, see Appendix K). Notably, results of the questionnaire indicate that participants agree that the program meets their expectations and needs. Suggestions include the provision of more in-session time to interpret test questions and answer choices, and more in-session opportunities to develop responses to the essay questions and to receive teacher feedback on essays written outside of sessions. Comments included indications that the emphasis on test-taking skills was valuable and helpful, that supplemental materials were helpful and useful, that participants had positive reactions to the instructor's having taken the examinations.
The committee unanimously concluded that the contents of the study program were valid based on their expertise and experiences, the literature that was provided, and the perceptions of participants who have completed the program.

The committee unanimously concluded that there is sufficient statistical data to infer the effectiveness of the study program.
In discussion about the presentation of data supporting the effectiveness of the program, the ex post facto versus time series statistical analysis were discussed. The committee recommended presenting the data in the report in a manner similar to the way it was presented to the committee in order to present the information clearly.

The committee recommended the continuation of the as-needed supplemental sessions for review of topics that are of special concern to participants.

Appendix I

SUMMATIVE COMMITTEE HISTORY OF ACTIVITY

All members consented to serve on the committee through personal conversations, and each signed the Committee Consent Form. Teleconferencing was established as the means of conferring for the purpose of evaluating the findings of the formative committee and for making a determination as to what would be done with the final report to maximize its impact on the educational process.

Committee members were provided with the information gathered through the literature review, the study program outline, the formative committee history of activity and recommendations, the participant questionnaire tally of results, and the statistical data supporting the effectiveness of the study program. Additional information requested by the committee included the physical education teacher preparation planned program of studies, and the organizational chart of the School of Education.
The researcher was asked to be prepared to report, at the meeting, on the status of the NCATE accreditation self-study process at SCSU and within the teacher preparation program.

Committee members provided the following expertise in the summative evaluation process:

Dr. Lobosco, program planner and evaluation consultant provided guidance in the development of validation criteria for the study.

Dr. Morley, Assistant Professor in a similar physical education teacher preparation program at another university, evaluated the study by providing input from her experience in having recently participated in an accreditation self-study of her university's program. She provided guidance from her perspective as Scholar-in-Residence with the BEST (Beginning Educator Support & Training) program.

Barbara Westwater, consultant for Physical Education and Health Education in the Bureau of Teaching Standards and Instruction at the Connecticut State Department of Education provided resources and input regarding the Connecticut content standards and teaching standards for professional educators. She provided guidance from her perspective as the coordinator of the BEST (Beginning Educator Support & Training) program.

The committee concurred that there was sufficient evidence to support the content validity and effectiveness of the study program.

The committee made several recommendations:

Committee members compared Praxis II descriptive material with the physical education teacher preparation planned program of studies, and recommended that the upcoming process of accreditation self-study precipitate the alignment of (CSDE)Connecticut State Department of Education teaching standards, CSDE and NASPE content standards, and standards-driven revision of the planned program of studies.

The committee recommended that the results of the study be given to the following:

Exercise Science Department Curriculum Committee (a committee member provided several articles on the topic of the role of effective curriculum committees)

Dean of the School of Education

The committee recommended that the statistical evidence of the effectiveness of the program be made as widely known as possible, and encouraged the researcher to pursue publication of an article describing it One committee member encouraged the submission of the study for presentation at *Evaluation '99*, the national conference of the American Evaluation Association, in order to call attention to effective methods of raising teacher certification test scores.

The committee concurred with the recommendation of the formative committee that the program continue to be provided, and also concurred that evaluation and adjustment/revision of the curriculum should be ongoing.

Appendix J

PARTICIPANT QUESTIONNAIRE

Session Content and Process

Title of Program: PREPARATORY STUDY PROGRAM FOR THE PRAXIS II CONTENT EXAMINATION FOR TEACHER CERTIFICATION IN PHYSICAL EDUCATION

Please assist us in evaluating the quality of the program by completing this questionnaire. For each question, circle the number that best represents your view: 1 = NO, 2 = SOMEWHAT, and 3 = YES, DEFINITELY. Your specific comments and suggestions for improvement would be most appreciated, especially for those items marked "1 = NO" or "2 = SOMEWHAT."

1. Were the program objectives clear and realistic? 1 2 3
   Comments / suggestions: _____
   _____

2. Did you learn what you expected to learn? 1 2 3
   Comments / suggestions: _____
   _____

3. Was the material presented relevant and valuable to you? 1 2 3
   Comments / suggestions: _____
   _____

4. Was the material presented at an appropriate rate? 1 2 3
   Comments / suggestions: _____
   _____

5. Was there an adequate amount of time allotted to each topic? 1 2 3
   Comments / suggestions: _____
   _____

6. Did the instructional techniques used adequately assist you in learning the material? 1 2 3
   Comments / suggestions: _____
   _____

7. Were there opportunities for you to actively participate in the sessions? 1 2 3
   If there were, was this participation beneficial to you? 1 2 3
   Comments / suggestions: _____
   _____

8. Did the instructional aids and materials (test-at-a-glance booklet, scoring rubric, sample tests, etc.) enhance the learning process? 1 2 3
   Comments / suggestions: _____
   _____

9. Was the program well organized and effectively conducted? 1 2 3
   Comments / Suggestions: _____
   _____

Source: Caffarella, R. (1994). Planning Programs for Adult Learners. San Francisco: Jossey-Bass.

Appendix K

PARTICIPANT QUESTIONNAIRE

TALLY OF RESPONSES:
18 students have participated in the study program
14 students completed the questionnaire

Session Content and Process

Title of Program: PREPARATORY STUDY PROGRAM FOR THE PRAXIS II CONTENT EXAMINATION FOR TEACHER CERTIFICATION IN PHYSICAL EDUCATION

Please assist us in evaluating the quality of the program by completing this questionnaire. For each question, circle the number that best represents your view: 1 = NO, 2 = SOMEWHAT, and 3 = YES, DEFINITELY. Your specific comments and suggestions for improvement would be most appreciated, especially for those items marked "1 = NO" or "2 = SOMEWHAT."

(Types of responses)	(Tally of responses)
1. Were the program objectives clear and realistic?	1 2 3
Comments / suggestions:	(14)
2. Did you learn what you expected to learn?	1 2 3
Comments / suggestions:	(4) (10)
would have liked more definite answers to questions	
3. Was the material presented relevant and valuable to you?	1 2 3
Comments / suggestions:	(2) (12)
especially test-taking skills	
test-taking skills isn't covered anywhere else	
practice tests, under real conditions, very helpful	
tips on using bubble sheets helpful	
4. Was the material presented at an appropriate rate?	1 2 3
Comments / suggestions:	(2) (12)
5. Was there an adequate amount of time allotted to each topic?	1 2 3
Comments / suggestions:	(2) (12)
include more time to interpret test questions and answer choices	
more time in class to write essays	
6. Did the instructional techniques used adequately assist you in learning the material?	1 2 3
Comments / suggestions:	(6) (8)
provide more time in class to answer essays	
give individual feedback on essays	
taking the practice tests under simulated conditions was helpful	
7. Were there opportunities for you to actively participate in the sessions?	1 2 3
more time for discussions	(6) (8)
more time to discuss answers	

If there were, was this participation beneficial to you? 1 2 3
Comments / suggestions: (6) (8)
reading questions and figuring out answers together helped allot
study group format was comfortable

8. Did the instructional aids and materials (test-at-a-glance booklet, scoring rubric, sample tests, etc.) enhance the learning process? 1 2 3
Comments / suggestions: (14)
sample tests, scoring rubric, hand-outs helpful

9. Was the program well organized and effectively conducted? 1 2 3
Comments / Suggestions: (2) (12)
hearing about the instructor's experiences preparing for the tests and actually taking them made this course relevant